Computer Science Semester 1

Course Description

Computing is everywhere. Take Computer Science to understand more about the computing rich world we live in, in a hands on, practical way, using a computer programming language called Python. Understand how to use planning tools and create software to do the tasks you want. Create code using building blocks and skills you can easily use in any other language. Explore the world of professional software developers.

Prerequisites

Algebra I

Course Materials

Required

- Microsoft Office or Google Docs (See the Minimum Technical Skills and Special Technology Utilized by Students)
- Reliable Internet Access
- Laptop or Desktop (Tablets need Puffin app for internet browsing)
- Adobe Acrobat Reader
- Python software ([free download](#))

Recommended

Course Goals

Upon completion of the course, students will…

- the early days of computing
- the key parts of computer programming that make a program work
- what object oriented programming is and how to use it
- how modern software development teams coordinate massive software projects
- make choices about your subsequent computer classes, and what areas are of greatest interest to you

Units of Instruction

- Unit 1: Overview of Computing and Logic (How are Computers Used?)
- Unit 2: How to Talk to a Computer and Get it to Answer (Introduction to Computer Programming)
- Unit 3: What Makes Code So Variable?
- Unit 4: Why Does Coding Have You in a Loop? (The Loop Construct)

- Unit 5: Decisions, Decisions….
- Unit 6: What's Your Function? (How to Divide and Conquer)
- Unit 7: Now for Something Classy
- Unit 8: Has AI Got Rhythm? How to Develop a Plan for a Program

Assignments

The course includes the following assignments:

1. 0 Discussions
2. 26 Dropboxes
3. 14 Quizzes (Includes Unit Test and Final Exam)

Grading / Evaluation

Grading Scheme

Course grades will be determined as follows:

97% or better	A+	77% to 79%	C+
93% to 96%	A	73% to 76%	C
90% to 92%	A -	70% to 72%	C -
87% to 89%	B +	67% to 69%	D+
83% to 86%	B	63% to 66%	D
80% to 82%	B -	60% to 62%	D-
		59% or less	F

Assignment Descriptions and Weightings

The assignments for this course are weighted as follows:

Assignments	Percentage of Final Grade
Course Work (Discussions, Dropboxes and Quizzes)	70%
Final Exam	30%
Total	**100%**

Instructor Contact Response Time

Contact information for the Indiana Online Instructor can be found by clicking on the Course Home link in the navigation menu.

The instructor will respond to student inquiries (email, text, call) **within 24 hours**. Assignments will be graded within 24 hours and grades will be posted.

Information about Final Exam

The Final Exam must be proctored. Final Exams count for 30% of the total grade.

Expectations for Academic Conduct

Student Handbook

It is your responsibility to read the student handbook and contact your instructor if you have any questions.

Acceptable User & Netiquette Policy

The Acceptable Use Policy outlines the guidelines and behaviors that all users (administrators, teachers, students and parents) are expected to follow when participating in the Indiana Online program.

Academic Integrity
Honesty is the Indiana Online policy!

CIPA

The Children's Internet Protection Act (CIPA) is a federal law enacted by Congress to address concerns
about access to offensive content over the Internet on school and library computers.

Assistance for Students with Disabilities

Indiana Online supports an inclusive learning environment for all students. If there are aspects of the instruction or design of this course that hinder your full participation, such inaccessible web content, or the use of non-captioned videos and podcasts, reasonable accommodations can be arranged.

Learn more about the accessibility features in Indiana Online's Learning Management System (LMS), Desire2Learn.

Suggested Assistive Technologies

- Screen Readers: VoiceOver and NVDA
- Chrome Extensions: ChromeVox and Speakit!

Minimum Technical Skills and Special Technology Utilized by Students

This course is totally online. All instructional content and interaction takes place over the internet. In addition to baseline word processing skills and sending/receiving email with attachments, students will be expected to search the internet and upload / download files. In addition, students may need one or more of these technology plug-ins to access course materials and content.

Students should have access to Microsoft Office or have an established Google account to work on course documents.

Technical Questions? Please contact the Indiana Online Helpdesk.